PIER Demand Response Research Center

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Demand Response R&D Symposium

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drrc.lbl.gov

Center Overview

Objective

Develop, prioritize, conduct and disseminate multi-institutional research to facilitate Demand Response

Scope

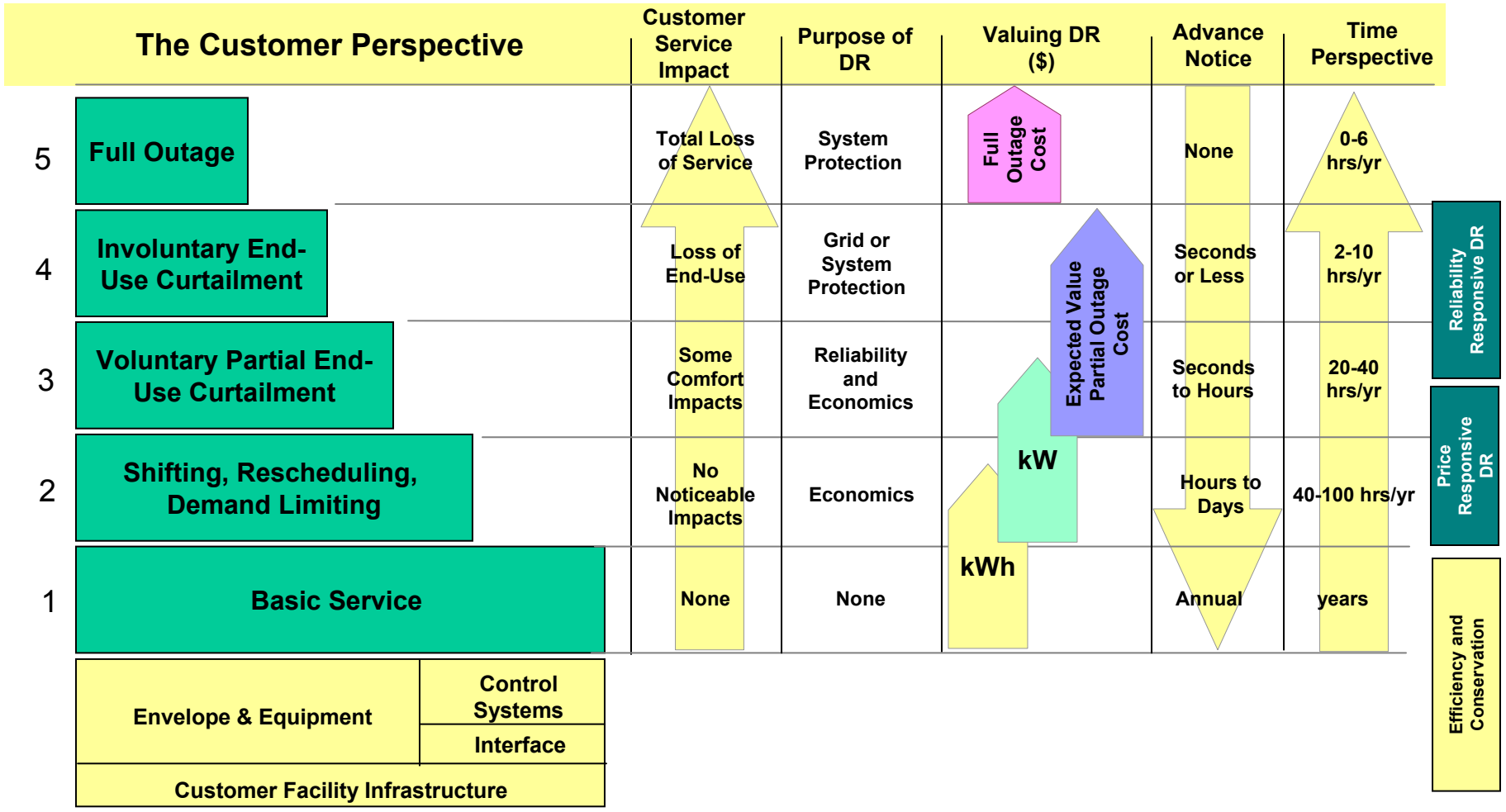
Technologies, policies, programs, strategies and practices, emphasizing a market connection for all sectors (residential, commercial, and industrial)

Stakeholders

Partners Planning Committee, Annual R&D Plan

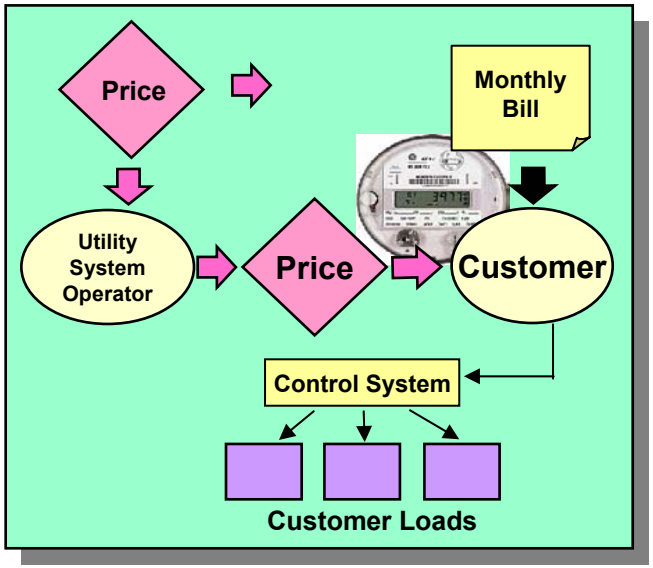
- ❑ **State Policy Makers**
- ❑ **Researchers**
- ❑ **Information and Metering System Developers**
- ❑ **Aggregators**
- ❑ **Program Implementers**
- ❑ **Utilities**
- ❑ **Industry Trade Associations**
- ❑ **Building Owners / Operators**
- ❑ **Building Equipment Manufacturers**
- ❑ **End-Use customers**

Integrating Efficiency, Price-Response and DR for Reliability



Current Center Projects

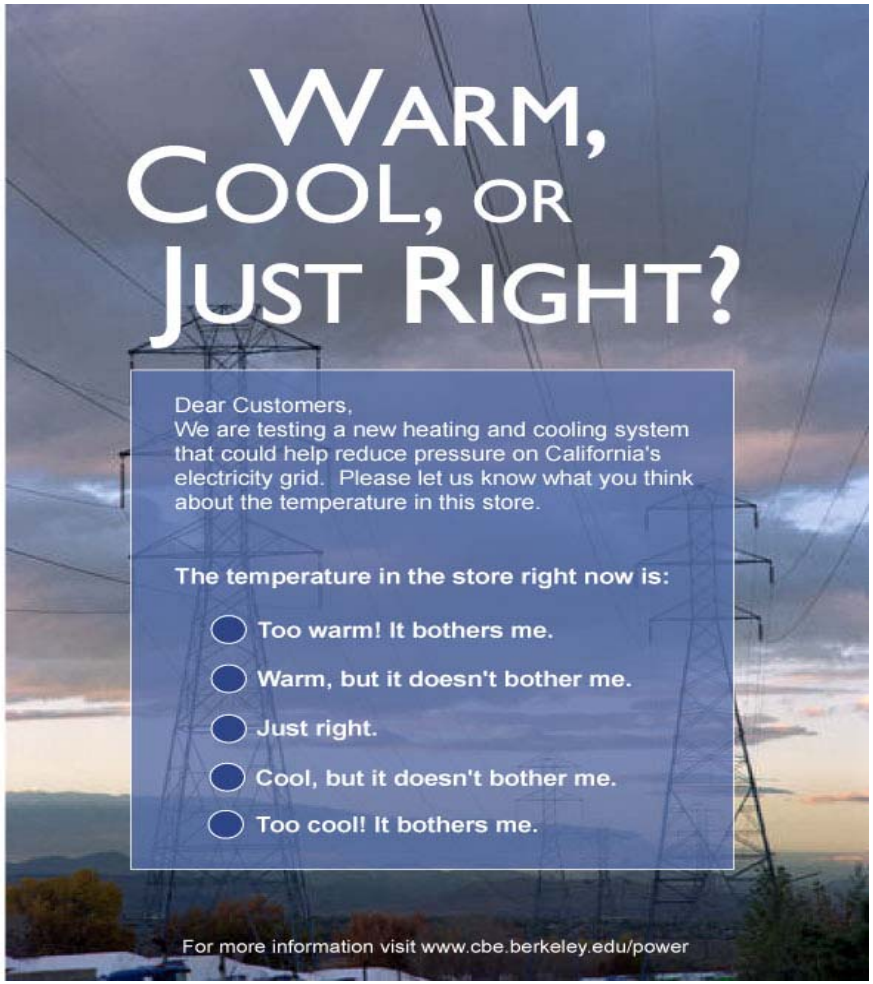
- Program and Tariff Analysis: Customer Experience with Dynamic Electricity Pricing
- Information Management for Automated Demand Response in Large Facilities
- Demand Shifting with Building Thermal Mass
- Center R&D Scoping Study

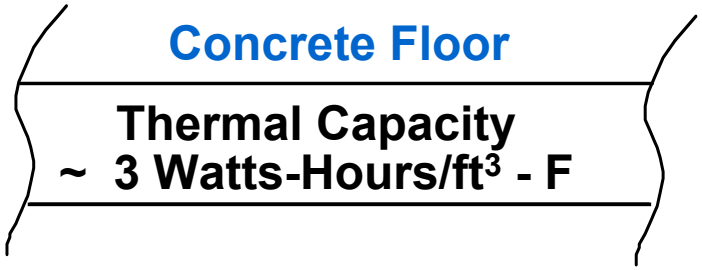


Dispatchable Price/Rate, Indirect Control

Demand Shifting with Thermal Mass

- **Goal** - understand demand shifting with building mass & develop optimal control
- **Current Work** – large & small commercial building field studies & preliminary simulation study
- **Recent Results** –2003 Santa Rosa demo shifted afternoon chiller power (2 W/ft^2)
- **R&D Team** – So. Cal. Edison, Purdue, UC Berkeley, LBNL





Scoping Study: Developing a Multi-Year R&D Plan

Convene a National Panel of DR Experts

- Roundtable Forum (December 2-3)
- Summarize DR knowledge
- Identify DR research needs
- Identify specific research opportunities

Partners Planning Committee

- Review, classify DR research opportunities
- Define / Prioritize DR projects